

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all earlier versions:

Claim 1 (currently amended). A nozzle for a hose or fixed pipework installation, the nozzle comprising:

a body;

a channel extending through the body of the nozzle; and

a fluid deflector arranged at or near the downstream end of the channel, and wherein the fluid deflector determines the direction of flow of the fluid as it leaves the nozzle;

wherein the fluid flow deflector and the nozzle together define a width of the channel at or near said downstream end, said channel width being variable by adjusting a position of the fluid deflector relative to the nozzle body;

wherein the nozzle comprises a self-cleaning mechanism for adjusting the channel width.

Claims 2–3 (canceled).

Claim 4 (currently amended). A nozzle as claimed in Claim 29 Claim 3 wherein the fluid deflector includes a deflecting surface positioned relative to the end of the channel to define the width of the channel at or near the downstream end of the channel.

Claim 5 (original). A nozzle as claimed in Claim 4 wherein at least part of the channel is defined between the deflecting surface and an outlet surface of the body.

Claim 6 (original). A nozzle as claimed in Claim 5 wherein the deflecting surface and the body outlet surface are substantially parallel.

Claim 7 (original). A nozzle as claimed in Claim 4 wherein the deflector surface is disposed at an obtuse angle relative to a main axis of the body.

Claim 8 (canceled).

Claim 9 (currently amended). A nozzle as claimed in Claim 1 ~~Claim 8~~ wherein the fluid deflector is movably mounted relative to the body, to enable adjustment of a position of the deflector relative to the body, to facilitate adjustment of the channel width.

Claim 10 (currently amended). A nozzle as claimed in Claim 1 ~~Claim 8~~ wherein the channel is provided with a gap or space suitable for accommodating a spacer to alter the position of the fluid deflector relative to the end of the channel, thereby varying the width of said channel.

Claim 11 (currently amended). A nozzle as claimed in Claim 1–~~Claim 8~~ wherein the deflector is threadably coupled to the body, such that rotation of the deflector relative to the body advances and/or retracts the deflector relative to the body, thereby facilitating adjustment of the channel width.

Claim 12 (canceled).

Claim 13 (currently amended). A nozzle as claimed in Claim 1 ~~Claim 12~~ wherein the self-cleaning mechanism comprises an actuator and one

or more sensors, the actuator moving the deflector in response to a detected reduction increase in fluid flow rate indicative of trapped debris in the nozzle.

Claim 14 (currently amended). A nozzle as claimed in Claim 4 wherein the fluid deflector comprises the deflecting surface and a central beam, ~~shaft, boss or the like~~ extending from the deflecting surface into the body of the nozzle, the central beam being attachable to the body of the nozzle.

Claim 15 (currently amended). A nozzle as claimed in Claim 29 Claim 1 wherein the channel extending through the body of the nozzle is an annular channel.

Claim 16 (currently amended). A nozzle as claimed in Claim 29 Claim 1 wherein the nozzle further comprises a central channel extending through the body of the nozzle.

Claim 17 (original). A nozzle as claimed in Claim 16 wherein the central channel extends through the central beam of the deflector.

Claim 18 (currently amended). A nozzle as claimed in Claim 29 Claim 1 wherein the nozzle is further provided with sensor means.

Claim 19 (original). A nozzle as claimed in Claim 18 wherein the sensor means is located in the fluid deflector.

Claim 20 (original). A nozzle as claimed in Claim 19 wherein the sensor means are embedded in a front surface of the fluid deflector.

Claim 21 (original). A nozzle as claimed in Claim 18 wherein the sensor means is located in the body of the nozzle.

Claim 22 (previously presented). A nozzle as claimed in Claim 16 wherein the nozzle further comprises filter coupling means for coupling a filter to the upstream end of the central channel.

Claim 23 (previously presented). A nozzle as claimed in Claim 16 wherein the nozzle further comprises nozzle-coupling means for coupling a nozzle to the downstream end of the central channel.

Claim 24 (currently amended). A nozzle as claimed in Claim 29 Claim 1 wherein the fluid deflector is frusto-conical and is thus provided with a frusto-conical deflecting surface, angled away from the direction of fluid flow.

Claim 25 (original). A nozzle as claimed in Claim 24 wherein the frusto-conical deflecting surface extends beyond the maximum width of the channel to direct the flow of fluid.

Claim 26 (currently amended). A kit of parts for a nozzle according to Claim 1, the kit of parts comprising a body, and a fluid deflector and a coupling means adapted to connect the fluid deflector to the body, wherein the kit of parts when assembled forms the nozzle of Claim 29.

Claims 27–28 (canceled).

Claim 29 (new). A hydrocarbon well-test flare nozzle for a hose or fixed pipework installation, the nozzle adapted for forming a water wall around a flare in a hydrocarbon well-test operation and comprising:

a body having an inlet and an outlet;

a channel extending through the body of the nozzle between the inlet and the outlet; and

a fluid deflector arranged at or near the downstream end of the channel adjacent the body outlet, ~~and wherein~~ the fluid deflector determines determining the direction of flow of the fluid as it leaves the nozzle;

wherein the fluid flow deflector and the nozzle together define a width of the channel at or near said downstream end, said channel width being variable by adjusting a position of the fluid deflector relative to the nozzle body;

wherein the body inlet, the body outlet and the fluid deflector are arranged on a longitudinal axis of the body such that, in use, the fluid flows from the body inlet along the channel to the body outlet and impinges on the fluid deflector with minimal energy loss prior to impingement on the fluid deflector; and

wherein the nozzle comprises a self-cleaning mechanism for adjusting the channel width.

Claim 30 (new). A nozzle as claimed in Claim 7 wherein the deflector is disposed at an angle of approximately 105 degrees relative to the main axis of the body.

Claim 31 (new). A nozzle as claimed in Claim 29 wherein the fluid deflector is movably mounted relative to the body, to enable adjustment of a position of the deflector relative to the body, to facilitate adjustment of the channel width.

Claim 32 (new). A nozzle as claimed in Claim 29 wherein the channel is provided with a gap or space suitable for accommodating a spacer to alter the position of the fluid deflector relative to the end of the channel, thereby varying the width of said channel.

Claim 33 (new). A nozzle as claimed in Claim 29 wherein the deflector is threadably coupled to the body, such that rotation of the deflector relative to the body advances and/or retracts the deflector relative to the body, thereby facilitating adjustment of the channel width.

Claim 34 (new). A nozzle as claimed in Claim 29 wherein the self-cleaning mechanism comprises an actuator and one or more sensors, the actuator moving the deflector in response to a detected reduction in fluid flow rate indicative of trapped debris in the nozzle.